A New Method OF ARITHMETICK: OR, THE *Rule of* PRACTICE MADE PERFECT.

Together with

Some Useful REMARKS UPON CALCULATING Customs *and* Exchange.

By JOHN KNOTT, Teacher of the MATHEMATICKS, in *Norwich.*

Nota vel ignota, valet Brevitas.

NORWICH: Printed by *Freeman Collins*, and Sold by

Price One Shilling Six-pence

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Cuftoms [illegible]

MVSEVM
BRITAN
NICVM

By JOHN [illegible]

Teacher of the MATHEMATICKS, in Norwich.

Nota qui ignoras, vult Proficias.

NORWICH: Printed by [illegible]

Price One Shilling Six-pence.

To Richard Ferrier, *Esq;*

SIR,

I Have taken the Freedom, from our former Converſation in Numbers, to Offer the following Sheets to YOUR Protection.

The Method (as far as I am able to judge) is, what has not been made Publick, ſince the Invention of Figures, and tho' I could almoſt flatter my Self, it will give a General Satisfaction, to a People, ſo well acquainted with Commerce, as the Inhabitants of *Great Britain*, I could not withſtand ſo fair an Opportunity of Uſhering it to the World with the Advantages of a Perſon, whoſe Judgment and Inclination to Encourage this Kind of Learning is unqueſtionable. I am,

SIR,

With the laſt Reſpect,

Yours, *J. K.*

THE INTRODUCTION.

THE *Rule of* PRACTICE *consists chiefly in Multiplying and Dividing any Sum of Money, without altering the Denomination, or Terms wherein it is given.*

For Example. Let it be required to Multiply

	l.	*s.*	*d.*	*q.*	
	5	19	7	3	*by* 9
Answ.	53	16	9	3	

Thus Performed.

Nine times 3 *are* 27, *put down* 3 *Farthings, and carry* 6 *Pence, then* 9 *times* 7 *are* 63, *and* 6 *make* 69 *put down* 9 *Pence, and carry* 5 *Shillings; also* 9 *times* 9 *are* 81, *and* 5 *make* 86, *put down* 6 *Shillings, and carry* 8 *Angels; again* 9 *times* 1 *are* 9, *and* 8 *make* 17, *put down* 1 *Angel, and carry* 8 *Pounds; lastly,* 9 *times* 5 *are* 45, *and* 8 *make* 53 *Pounds, &c. as in the Example.*

To prove this Performance by Diviſion, let it be required to divide the ſaid

	l.	*s.*	*d.*	*q.*	
	53	16	9	3	*by* 9
Anſw.	5	19	7	3	*Thus done,*

The Nines in 53 *are* 5 *times, put down* 5, *and* 8 *remain,* viz. 8 *Pounds, which make* 16 *Angels, and* 1 *are* 17, *then the Nines in* 17 *is once, put down* 1 *and* 8 *remain,* viz. 8 *Angels, which make* 80 *Shillings, and* 6 *are* 86, *alſo the Nines in* 86 *are* 9 *times, put down* 9 *and* 5 *remain,* viz. 5 *Shillings, which are* 60 *Pence, and* 9 *are* 69; *again, the Nines in* 69 *are* 7 *times, put down* 7, *and* 6 *remain,* viz. 6 *Pence, which are* 24 *Farthings, and* 3 *are* 27; *laſtly the Nines in* 27 *are* 3 *times exactly, which put down alſo, as in the Example.*

The next Thing to be conſidered, is the Table of Aliquot Parts, and how each of thoſe Parts may be performed at one Operation; I ſhall therefore explain an Example or Two, which (I preſume) will be ſufficient for Underſtanding the Reſt.

Let it be required to caſt up 7593 *Ells, at* 3 *d. per Ell.*

Queſt.	7593	*at* 3 *d.*	
Anſw.	94	18	3

Becauſe Three-pence is the 80*th Part of a Pound, divide* 7593 *by* 80, *or, which is the ſame Thing, ſeparate the Figure* 3 *in the Place of Units by a Comma, and divide* 759 *by* 8, *thus. The Eights in* 75 *are* 9 *times, which put down under the* 5, *and* 3 *remain, then the Eights in* 39 *are* 4 *times, which put down alſo, and* 7 *remain,* viz. 73 *Threepences, but becauſe* 4 *make a Shilling, divide the ſaid* 73 *by* 4, *that is, the Fours in* 7 *is once, which put down, and* 3 *remain; alſo the Fours in* 33 *are* 8 *times, which put down, and there remains one Threepence as above.*

Again, Quæſt. 254,3 *at* 8 *d.*

Anſw. 84 15 4

Separate the Figure 3 *in the Place of Units as before, and becauſe Eight-pence is the* 30*th Part of a* Pound, *divide* 254 *by* 3, *and you will find* 84, *and* 2 *left, which with the Figure* 3 *cut off, will make* 23 *Eight-pences; now becauſe Eight-pence is not an even or Aliquot Part of a Shilling, double the* 23 *Eight-pences, and they will make* 46 *Groats, which being divided by* 3 *will give* 15 *s.* 4 *d.*

Thus are the Aliquot Parts of a Pound *(which may ſerve as a Baſis or Foundation for the reſt) eaſily performed: And becauſe it would be too tedious to repreſent the ſeveral Parts of theſe, I have deſigned the following Characters as a Key to the whole Work, by which every particular Operation is Diſcovered at the Firſt View.*

I confeſs Symbols are not frequently made uſe of in theſe early Parts of Number; but that they are preferable to Verbal Demonſtration, I have the Opinion of our late learned Country-Man, Mr. William Oughtred, *who judges they cannot be too early implanted in the Minds of Youth, conſidering, how they help and ſtrengthen the Imagination, by repreſenting in one ſingle Page, what would take whole Sheets otherwiſe to explain.*

An Explanation of the Characters.

+	Addition.
—	Subtraction.
×	Multiplication.
÷	Diviſion.
s	The Sum given.
a	The Firſt Operation.
b	The Second.
c	The Third.
d	The Fourth, and ſo forward Alphabetically.
<	The Sign of Omiſſion, that is ſuch Line to which this Sign is prefixed, is to be omitted, or not added with the reſt of the Work.
r	The Rate, or Price of a Yard, Ell, *&c.*

Note. When more than two Lines are to be added, to avoid the frequent Repetition of the ſame Sign inſtead of writing a + b + c, *viz.* the Sum of the Firſt, Second and Third Operations, I put the Sign of Addition only between the firſt and laſt Letters, and a ſmall Figure repreſenting the Number of ſuch Operations, immediately following: Thus, a + c ^{3}.

A Table of such Aliquot Parts of a Pound Sterling, as may be Performed at one Operation only.

s.	d.				th.
0	2	—	—	—	120
0	3	—	—	—	80
0	4	—	—	—	60
0	6	—	—	—	40
0	8	—	—	—	30
1	0	—	—	—	20
1	8	—	—	—	12
2	0	—	—	—	10
2	6	—	—	—	8
3	4	—	—	—	6
4	0	—	—	—	5
5	0	—	—	—	4
6	8	—	—	—	3
10	0	—	—	—	d. ½

Queſt.

PRACTICE

Queſt.	453,6 at 1 q.	Queſt.	453,6 at 1 q.
s ÷ 80	56 14	s ÷ 120	37 16
a ÷ 12	Anſw. 4 14 6	a ÷ 8	Anſw. 4 14 6

Queſt.	279,5 at 2 q.	Queſt.	279,5 at 2 q.
s ÷ 40	69 17 6	s ÷ 60	46 11 8
a ÷ 12	Anſw. 5 16 5 2	a ÷ 8	Anſw. 5 16 5 2

Queſt.	864,1 at 3 q.	Queſt.	864,1 at 3 q.
s ÷ 40	216 0 6	s ÷ 80	108 0 3
a ÷ 8	Anſw. 27 0 0 3	a ÷ 4	Anſw. 27 0 0 3

Queſt.	369,0 at 1 d.	Queſt.	369,0 at 1 d.
s ÷ 20	184 10	s ÷ 40	92 5
a ÷ 12	Anſw. 15 7 6	a ÷ 6	Anſw. 15 7 6

Queſt.	7295 at 1 ¼ d.	Queſt.	7295 at 1 ¼ d.
s ÷ 8	911 17 6	s ÷ 12	607 18 4
a ÷ 6	151 19 7	a ÷ 8	75 19 9 2
b ÷ 4	Anſw. 37 19 10 3	b ÷ 2	Anſw. 37 19 10 3

Queſt.	246,9 at 1 ½ d.	Queſt.	246,9 at 1 ½ d.
s ÷ 20	123 9	s ÷ 40	61 14 6
a ÷ 8	Anſw. 15 8 7 2	a ÷ 4	Anſw. 15 8 7 2

PRACTICE.

Queſt.	398,7 at 1 ¼ d.	Queſt.	3987 at 1 ¼ d.
s ÷ 120	33 4 6	s × 7	2790,9
a ÷ 8	4 3 0 3	a ÷ 80	348 17 3
a — b	Anſw. 29 1 5 1	b ÷ 12	Anſw. 29 1 5 1

Queſt.	479,6 at 2 d.	Queſt.	479,6 at 2 d.
s ÷ 120	Anſw. 39 19 4	s ÷ 20	239 16
		a ÷ 6	Anſw. 39 19 4

Queſt.	378,9 at 2 ¼ d.	Queſt.	378,9 at 2 ¼ d.
s ÷ 120	31 11 6	s ÷ 80	47 7 3
a ÷ 8	3 18 11 1	a ÷ 4	11 16 9 3
a + b	Anſw. 35 10 5 1	a — b	Anſw. 35 10 5 1

Queſt.	3587 at 2 ½ d.	Queſt.	3587 at 2 ½ d.
s ÷ 8	448 7 6	s ÷ 12	298 18 4
a ÷ 12	Anſw. 37 7 3 2	a ÷ 8	Anſw. 37 7 3 2

Queſt.	963,1 at 2 ¼ d.	Queſt.	9631 at 2 ¼ d.
s ÷ 80	120 7 9	s × 11	10594,1
a ÷ 12	10 0 7 3	a ÷ 80	1324 5 3
a — b	Anſw. 110 7 1 1	b ÷ 12	Anſw. 110 7 1 1

Queſt.	472,9 at 3 d.	Queſt.	472,9 at 3 d.
s ÷ 80	Anſw. 59 2 3	s ÷ 20	236 9
		a ÷ 4	Anſw. 59 2 3

Queſt.	654,2 at 3 ¼ d.				Queſt.	6542 at 3 ¼ d.			
s ÷ 80	81	15	6	½	s ÷ 12	545	+	2 q.	
a ÷ 12	6	16	3	2	s + a	708,7			
a + b	Anſw. 88	11	9	2	b ÷ 80	Anſw. 88	11	9	2

Queſt.	639,5 at 3 ½ d.				Queſt.	639,5 at 3 ½ d.			
s ÷ 80	79	18	9		s ÷ 60	106	11	8	
a ÷ 6	13	6	5	2	a ÷ 8	13	6	5	2
a + b	Anſw. 93	5	2	2	a — b	Anſw. 93	5	2	2

Queſt.	3455 at 3 ¼ d.				Queſt.	345,5 at 3 ¼ d.			
s ÷ 8	431	17	6		s ÷ 80	43	3	9	
a ÷ 8	Anſw. 53	19	8	1	a ÷ 4	10	15	11	1
					a + b	Anſw. 53	19	8	1

Queſt.	893,4 at 4 d.				Queſt.	893,4 at 4 d.			
s ÷ 60	Anſw. 148	18			s ÷ 20	446	14		
					a ÷ 3	Anſw. 148	18		

Queſt.	885,5 at 4 ¼ d.				Queſt.	885,5 at 4 ¼ d.			
s ÷ 120	73	15	10		s ÷ 80	110	13	9	
s ÷ 120	73	15	10		a ÷ 3	36	17	11	
b ÷ 8	9	4	5	3	b ÷ 4	9	4	5	3
a + c^3	Anſw. 156	16	1	3	a + c^3	Anſw. 156	16	1	3

Queſt.	432,9 at 4½ d.	Queſt.	432,9 at 4½ d.
s ÷ 80	54 2 3	s ÷ 60	72 3
a ÷ 2	27 1 1 2	a ÷ 8	9 0 4 2
a + b	Anſw. 81 3 4 2	a + b	Anſw. 81 3 4 2

Queſt.	389,1 at 4¼ d.	Queſt.	389,1 at 4¼ d.
s ÷ 80	48 12 9	s ÷ 60	64 17
a ÷ 2	24 6 4 2	a ÷ 8	8 2 1 2
b ÷ 6	4 1 0 3	b ÷ 2	4 1 0 3
a + c^3	Anſw. 77 0 2 1	a + c^3	Anſw. 77 0 2 1

Queſt.	1561 at 5 d.	Queſt.	1561 at 5 d.
s ÷ 8	195 2 6	s ÷ 12	130 1 8
a ÷ 6	Anſw. 32 10 5	a ÷ 4	Anſw. 32 10 5

Queſt.	874,6 at 5¼ d.	Queſt.	874,6 at 5¼ d.
s ÷ 40	218 13	s ÷ 80	109 6 6
a ÷ 8	27 6 7 2	a ÷ 4	27 6 7 2
a — b	Anſw. 191 6 4 2	b × 7	Anſw. 191 6 4 2

Queſt.	321,9 at 5½ d.	Queſt.	321,9 at 5½ d.
s ÷ 40	80 9 6	s ÷ 80	40 4 9
a ÷ 12	6 14 1 2	a ÷ 6	6 14 1 2
a — b	Anſw. 73 15 4 2	b × 11	Anſw. 73 15 4 2

Queſt.	712,5 at 5¼ d.	Queſt.	712,5 at 5¼ d.
s ÷ 120	59 7 6	s ÷ 80	89 1 3
s ÷ 80	89 1 3	a × 2	178 2 6
b ÷ 4	22 5 3 3	a ÷ 12	7 8 5 1
a + c ³	Anſw. 170 14 0 3	b — c	Anſw. 170 14 0 3

Queſt.	243,7 at 6 d.	Queſt.	243,7 at 6 d.
s ÷ 40	Anſw. 60 18 6	s ÷ 20	121 17
		a ÷ 2	Anſw. 60 18 6

Queſt.	610,5 at 6 ¼ d.	Queſt.	610,5 at 6 ¼ d.
s ÷ 80	76 6 3	s ÷ 60	101 15
s ÷ 80	76 6 3	a ÷ 2	50 17 6
b ÷ 12	6 7 2 1	b ÷ 8	6 7 2 1
a + c ³	Anſw. 158 19 8 1	a + c ³	Anſw. 158 19 8 1

Queſt.	711,3 at 6 ½ d.	Queſt.	7113 at 6 ½ d.
s ÷ 40	177 16 6	s ÷ 12	592 + 4 ½ d.
a ÷ 12	14 16 4 2	s + a	770,5
a + b	Anſw. 192 12 10 2	b ÷ 40	Anſw. 192 12 10 2

Queſt.	381,9 at 6 ¼ d.	Queſt.	381,9 at 6 ¼ d.
s ÷ 40	95 9 6	s ÷ 80	47 14 9
a ÷ 8	11 18 8 1	a ÷ 4	11 18 8 1
a + b	Anſw. 107 8 2 1	b × 9	Anſw. 107 8 2 1

Queſt.	238,3 at 7 d.	Queſt.	238,3 at 7 d.
s ÷ 40	59 11 6	s ÷ 60	39 14 4
a ÷ 6	9 18 7	s ÷ 80	29 15 9
a + b	Anſw. 69 10 1	a + b	Anſw. 69 10 1

Queſt.	53,4 at 7 ¼ d.	Queſt.	53,4 at 7 ¼ d.
s ÷ 40	13 7	s ÷ 80	6 13 6
a ÷ 6	2 4 6	s ÷ 30	17 16
b ÷ 4	11 1 2	a ÷ 4	1 13 4 2
a + c³	Anſw. 16 2 7 2	b — c	Anſw. 16 2 7 2

Queſt.	6215 at 7 ½ d.	Queſt.	6215 at 7 ½ d.
s ÷ 4	1553 15	s ÷ 8	776 17 6
a ÷ 8	Anſw. 194 4 4 2	a ÷ 4	Anſw. 194 4 4 2

Queſt.	444,3 at 7 ¼ d.	Queſt.	444,3 at 7 ¼ d.
s ÷ 40	111 1 6	s ÷ 60	74 1
a ÷ 4	27 15 4 2	s ÷ 80	55 10 9
b ÷ 6	4 12 6 3	b ÷ 4	13 17 8 1
a + c³	Anſw. 143 9 5 1	a + c³	Anſw. 143 9 5 1

Queſt.	299,5 at 8 d.	Queſt.	299,5 at 8 d.
s ÷ 30	Anſw. 99 16 8	s ÷ 60	49 18 4
		a × 2	Anſw. 99 16 8

Queſt.	354,3 at 8¼ d.	Queſt.	354,3 at 8¼ d.
s ÷ 40	88 11 6	s × 11	3897,3
a ÷ 8	11 1 5 1	a ÷ 80	487 3 3
b × 11	Anſw. 121 15 9 3	b ÷ 4	Anſw. 121 15 9 3

Queſt.	210,5 at 8½ d.	Queſt.	210,5 at 8½ d.
s ÷ 60	35 1 8	s ÷ 40	52 12 6
s ÷ 60	35 1 8	a ÷ 3	17 10 10
b ÷ 8	4 7 8 2	b ÷ 4	4 7 8 2
a + c ³	Anſw. 74 11 0 2	a + c ³	Anſw. 74 11 0 2

Queſt.	750,1 at 8¼ d.	Queſt.	750,1 at 8¼ d.
s ÷ 120	62 10 2	s ÷ 80	93 15 3
a × 3	187 10 6	a × 3	281 5 9
b ÷ 8	23 8 9 3	a ÷ 12	7 16 3 1
a + c ¹	Anſw. 273 9 5 3	b — c	Anſw. 273 9 5 3

Queſt.	406,5 at 9 d.	Queſt.	4065 at 9 d.
s ÷ 80	50 16 3	s × 3	1219,5
a × 3	Anſw. 152 8 9	a ÷ 80	Anſw. 152 8 9

Queſt.	459,1 at 9¼ d.	Queſt.	459,1 at 9¼ d.
s ÷ 40	114 15 6	s ÷ 30	153 0 8
a ÷ 2	57 7 9	a ÷ 8	19 2 7
b ÷ 12	4 15 7 3	b ÷ 4	4 15 7 3
a + c ³	Anſw. 176 18 10 3	a + c ³	Anſw. 176 18 10 3

Queſt.	87,9 at 9 ½ d.	Queſt.	87,9 at 9 ½ d.
s ÷ 40	21 19 6	s ÷ 30	29 6
a ÷ 2	10 19 9	a ÷ 8	3 13 3
b ÷ 6	1 16 7 2	b ÷ 2	1 16 7 2
a + c,	Anſw. 34 15 10 2	a + c	Anſw. 34 15 10 2

Queſt.	59,9 at 9 ¼ d.	Queſt.	59,9 at 9 ¼ d.
s ÷ 40	14 19 6	s ÷ 120	4 19 10
a ÷ 2	7 9 9	a × 5	24 19 2
a ÷ 4	1 17 5 1	a ÷ 8	12 5 3
a + c,	Anſw. 24 6 8 1	b — c	Anſw. 24 6 8 1

Queſt.	1557 at 10 d.	Queſt.	1557 at 10 d.
s ÷ 8	194 12 6	s ÷ 12	129 15
a ÷ 3	Anſw. 64 17 6	a ÷ 2	Anſw. 64 17 6

Queſt.	95,9 at 10 ¼ d.	Queſt.	95,9 at 10 ¼ d.
s ÷ 30	31 19 4	s ÷ 120	7 19 10
a ÷ 4	7 19 10	a × 5	39 19 2
b ÷ 8	19 11 3	a ÷ 8	19 11 3
a + c	Anſw. 40 19 1 3	b + c	Anſw. 40 19 1 3

Queſt.	534,9 at 10 ½ d.	Queſt.	534,9 at 10 ½ d.
s ÷ 20	267 9	s ÷ 80	66 17 3
a ÷ 8	33 8 7 2	a ÷ 2	33 8 7 2
a — b	Anſw. 234 0 4 2	b × 7	Anſw. 234 0 4 2

Queſt.	505,6 at 10 ¼ d.	Queſt.	5056 at 10 ¼ d.
s ÷ 60	84 5 4	s ÷ 6	842 13 4
s ÷ 40	126 8	s ÷ 80	63 4
b ÷ 8	15 16	a + b	905 17 4
a + c³	Anſw. 226 9 4	c ÷ 4	Anſw. 226 9 4

Queſt.	84,5 at 11 d.	Queſt.	84,5 at 11 d.
s ÷ 30	28 3 4	s ÷ 20	42 5
s ÷ 80	10 11 3	a ÷ 12	3 10 5
a + b	Anſw. 38 14 7	a — b	Anſw. 38 14 7

Queſt.	3500 at 11 ¼ d.	Queſt.	3500 at 11 ¼ d.
s ÷ 8	437 10	s × 3	10500
a ÷ 8	54 13 9	a ÷ 8	1312 10
b × 3	Anſw. 164 1 3	b ÷ 8	Anſw. 164 1 3

Queſt.	810,7 at 11 ½ d.	Queſt.	810,7 at 11 ½ d.
s ÷ 30	270 4 8	s ÷ 80	101 6 9
s ÷ 80	101 6 9	a × 4	405 7
b ÷ 6	16 17 9 2	a ÷ 6	16 17 9 2
a + c³	Anſw. 388 9 2 2	b — c	Anſw. 388 9 2 2

Queſt.	555,9 at 11 ¼ d.	Queſt.	555,9 at 11 ¾ d.
s ÷ 30	185 6	s ÷ 120	46 6 6
s ÷ 80	69 9 9	a × 6	277 19
b ÷ 4	17 7 5 1	a ÷ 8	5 15 9 3
a + c³	Anſw. 272 3 2 1	b — c	Anſw. 272 3 2 1

Queſt.	437,7 at 1 s.
s ÷ 20	Anſw. 216 17

Queſt.	437,7 at 1 s.
s ÷ 40	108 8 6
a × 2	Anſw. 216 17

Queſt.	785,6 at 1 s. 0 d. ¼
s ÷ 80	98 4
a × 4	392 16
a ÷ 12	8 3 8
b + c	Anſw. 400 19 8

Queſt.	785,6 at 1 s. 0 d. ¼
s ÷ 120	65 9 4
a × 6	392 16
a ÷ 8	8 3 8
b + c	Anſw. 400 19 8

Queſt.	4597 at 1 s. 0 d. ½
s ÷ 8	574 12 6
a ÷ 12	47 17 8 2
b × 5	Anſw. 239 8 6 2

Queſt.	4597 at 1 s. 0 d. ½
s × 50	22985,0
a ÷ 80	2873 2 6
b ÷ 12	Anſw. 239 8 6 2

Queſt.	395,6 at 1 s. 0 d. ¼
s ÷ 40	98 18
s ÷ 40	98 18
b ÷ 8	12 7 3
a + c 3	Anſw. 210 3 3

Queſt.	395,6 at 1 s. 0 d. ¼
s ÷ 80	49 9
a × 4	197 16
a ÷ 4	12 7 3
b + c	Anſw. 210 3 3

Queſt.	652,9 at 1 s. 1 d.
s ÷ 20	326 9
a ÷ 12	27 4 1
a + b	Anſw. 353 13 1

Queſt.	6529 at 1 s. 1 d.
s ÷ 12	544 + 1 d.
s + a	707,3
b ÷ 20	Anſw. 353 13 1

Queſt.	675,6 at 1s. 1d.¼	Queſt.	6756 at 1s. 1d.¼
s ÷ 20	337 16	s ÷ 12	563
a ÷ 12	28 3	a ÷ 4	140 + 9 d.
b ÷ 4	7 0 9	s + b 3	745.9
a + c 3	Anſw. 372 19 9	c ÷ 20	Anſw. 372 19 9

Queſt.	428,5 at 1s. 1d.½	Queſt.	428,5 at 1s 1d.½
s ÷ 20	214 5	s ÷ 80	53 11 3
a ÷ 8	26 15 7 2	a ÷ 2	26 15 7 2
a + b	Anſw. 241 0 7 2	b × 9	Anſw. 241 0 7 2

Queſt.	947,9 at 1s. 1d.¼	Queſt.	947,9 at 1s. 1d.¼
s ÷ 20	473 19	s ÷120	78 19 10
a ÷ 8	59 4 10 2	a × 7	552 18 10
b ÷ 6	9 17 5 3	a ÷ 8	9 17 5 3
a + c 3	Anſw. 543 1 4 1	b — c	Anſw. 543 1 4 1

Queſt.	378,6 at 1s. 2 d.	Queſt.	3786 at 1s. 2d.
s ÷120	31 11	s × 7	2650.2
a × 7	Anſw. 220 17	a ÷120	Anſw. 220 17

Queſt.	712,8 at 1s. 2 d.¼	Queſt.	712,8 at 1s. 2 d.¼
s ÷ 20	356 8	s ÷120	59 8
a ÷ 6	59 8	a × 7	415 16
b ÷ 8	7 8 6	a ÷ 8	7 8 6
a + c 3	Anſw. 423 4 6	b + c	Anſw. 423 4 6

Queſt.	697,9 at 1s. 2d.½	Queſt.	697,9 at 1s. 2d.½
s ÷ 20	348 19	s ÷ 30	232 12 8
a ÷ 6	58 3 2	s ÷ 40	174 9 6
b ÷ 4	14 10 9 2	b ÷ 12	14 10 9 2
a + c 3	Anſw. 421 12 11 2	a + c 3	Anſw. 421 12 11 2

Queſt.	769,8 at 1s. 2d.¼	Queſt.	769,8 at 1s. 2d.¼
s ÷ 30	256 12	s ÷ 80	96 4 6
s ÷ 40	192 9	a × 5	481 2 6
b ÷ 8	24 1 1 2	a ÷ 12	8 0 4 2
a + c 3	Anſw. 473 2 1 2	b — c	Anſw. 473 2 1 2

Queſt.	7832 at 1s. 3d.	Queſt.	783,2 at 1s. 3d.
s ÷ 8	979	s ÷ 80	97 18
a ÷ 2	Anſw. 489 10	a × 5	Anſw. 489 10

Queſt.	912,4 at 1s. 3d.¼	Queſt.	912,4 at 1s. 3d.¼
s ÷ 20	456 4	s ÷ 80	114 1
a ÷ 4	114 1	a × 5	570 5
b ÷ 12	9 10 1	a ÷ 12	9 10 1
a + c 3	Anſw. 579 15 1	b + c	Anſw. 579 15 1

Queſt.	719,1 at 1s. 3d.½	Queſt.	719,1 at 1s. 3d.½
s ÷ 20	359 11	s ÷ 80	89 17 9
a ÷ 4	89 17 9	a × 5	449 8 9
b ÷ 6	14 19 7 2	a ÷ 6	14 19 7 2
a + c 3	Anſw. 464 8 4 2	b + c	Anſw. 464 8 4 2

Queſt.	839,7 at 1s. 3 d.¼	Queſt.	839,7 at 1s. 3 d.¼
s ÷ 20	419 17	s ÷ 80	104 19 3
a ÷ 4	104 19 3	a × 5	524 16 3
b ÷ 4	26 4 9 3	a ÷ 4	26 4 9 3
a + c ³	Anſw. 551 1 0 3	b + c	Anſw. 551 1 0 3

Queſt.	459,7 at 1s. 4 d.	Queſt.	459,7 at 1s. 4 d.
s ÷ 30	153 4 8	s ÷ 60	76 12 4
a × 2	Anſw. 306 9 4	a × 4	Anſw. 306 9 4

Queſt.	259,7 at 1s. 4 d.¼	Queſt.	2597 at 1s. 4 d.¼
s ÷ 120	21 12 10	s ÷ 8	324 12 6
a × 8	173 2 8	s ÷ 12	216 8 4
a ÷ 8	2 14 1 1	a ÷ 8	40 11 6 3
b + c	Anſw. 175 16 9 1	b — c	Anſw. 175 16 9 1

Queſt.	809,0 at 1s. 4 d.½	Queſt.	8090 at 1s. 4 d.½
s ÷ 20	404 10	s × 11	8899,0
a ÷ 8	50 11 3	a ÷ 20	4449 10
b × 11	Anſw. 556 3 9	b ÷ 8	Anſw. 556 3 9

Queſt.	794,8 at 1s. 4 d.¾	Queſt.	794,8 at 1s. 4 d.¾
s ÷ 20	397 8	s ÷ 40	198 14
a ÷ 4	99 7	s ÷ 40	198 14
b ÷ 2	49 13 6	s ÷ 60	132 9 4
c ÷ 6	8 5 7	b ÷ 8	24 16 9
a + d ⁴	Anſw. 554 14 1	a + d ⁴	Anſw. 554 14 1

Queſt.	4712 at 1 s. 5 d.	Queſt.	471,2 at 1s. 5d.
s ÷ 12	392 13 4	s ÷ 30	157 1 4
s ÷ 80	58 18	s ÷ 30	157 1 4
a — b	Anſw. 333 15 4	b ÷ 8	19 12 8
		a + c	Anſw. 333 15 4

Queſt.	295,8 at 1 s. 5 d. ¼	Queſt.	295,8 at 1s. 5 d ¼
s ÷ 40	73 19	s ÷ 80	36 19 6
a × 3	221 17	a × 6	221 17
a ÷ 8	9 4 10 2	a ÷ 4	9 4 10 2
b — c	Anſw. 212 12 1 2	b — c	Anſw. 212 12 1 2

Queſt.	4793 at 1 s. 5 d. ½	Queſt.	4793 at 1 s. 5 d. ½
s ÷ 12	399 8 4	s ÷ 8	599 2 6
a ÷ 8	49 18 6 2	a ÷ 12	49 18 6 2
a — b	Anſw. 349 9 9 2	b × 7	Anſw. 349 9 9 2

Queſt.	695,4 at 1s. 5d. ¼	Queſt.	695,4 at 1s. 5d. ¼
s ÷ 80	86 18 6	s ÷120	57 19
a × 6	521 11	a × 9	521 11
a ÷ 12	7 4 10 2	a ÷ 8	7 4 10 2
b — c	Anſw. 514 6 1 2	b — c	Anſw. 514 6 1 2

Queſt.	427,6 at 1s. 6d.	Queſt.	4276 at 1s. 6d.
s ÷ 40	106 18	s × 3	1282,8
a × 3	Anſw. 320 14	a ÷ 40	Anſw. 320 14

Queſt.	796,3 at 1s. 6d. ¼	Queſt.	796,3 at 1s. 6d. ¼
s ÷ 80	99 10 9	s ÷ 120	66 7 2
a × 6	597 4 6	a × 9	597 4 6
a ÷ 12	8 5 10 3	a ÷ 8	8 5 10 3
b + c	Anſw. 605 10 4 3	b + c	Anſw. 605 10 4 3

Queſt.	493,2 at 1s. 6d. ½	Queſt.	493,2 at 1s. 6d. ½
s ÷ 20	246 12	s ÷ 40	123 6
a ÷ 2	123 6	a × 3	369 18
b ÷ 12	10 5 6	a ÷ 12	10 5 6
a + c ³	Anſw. 380 3 6	b + c	Anſw. 380 3 6

Queſt.	3798 at 1s. 6d. ¼	Queſt.	3798 at 1s. 6d. ¼
s ÷ 8	474 15	s × 5	18990
a ÷ 8	59 6 10 2	a ÷ 8	2373 15
b × 5	Anſw. 296 14 4 2	b ÷ 8	Anſw. 296 14 4 2

Queſt.	795,4 at 1s. 7d.	Queſt.	795,4 at 1s. 7d.
s ÷ 30	265 2 8	s ÷ 20	397 14
s ÷ 30	265 2 8	a ÷ 2	198 17
s ÷ 80	99 8 6	b ÷ 6	33 2 10
a + c ³	Anſw. 629 13 10	a + c ³	Anſw. 629 13 10

Queſt.	435,0 at 1s. 7 d.¼
s ÷ 80	54 7 6
s ÷ 12	362 10
a ÷ 4	13 11 10 2
b — c	Anſw. 348 18 1 2

Queſt.	435,0 at 1s. 7d.¼
s ÷ 30	145
s ÷ 30	145
s ÷ 80	54 7 6
c ÷ 12	4 10 7 2
a + d 4	Anſw. 348 18 1 2

Queſt.	796,3 at 1s. 7d.½
s ÷ 20	398 3
a ÷ 2	199 1 6
b ÷ 4	49 15 4 2
a + c 3	Anſw. 646 19 10 2

Queſt.	796,3 at 1s. 7d.½
s ÷ 80	99 10 9
a × 6	597 4 6
a ÷ 2	49 15 4 2
b + c	Anſw. 646 19 10 2

Queſt.	698,7 at 1s. 7d.¼
s ÷ 120	58 4 6
a × 10	582 5
a ÷ 8	7 5 6 3
b — c	Anſw. 574 19 5 1

Queſt.	698,7 at 1s. 7d.¼
s ÷ 30	232 18
s ÷ 30	232 18
s ÷ 80	87 6 9
c ÷ 4	21 16 8 1
a + d 4	Anſw. 574 19 5 1

Queſt.	8574 at 1s. 8d.
s ÷ 12	Anſw. 714 10

Queſt.	8574 at 1s. 8d.
s ÷ 4	2143 10
a ÷ 3	Anſw. 714 10

Queſt.	267,9 at 1s. 8d.¼	Queſt.	267,9 at 1s. 8d.¼
s ÷ 120	22 6 6 —	s ÷ 80	33 9 9
a × 10	223 5	s ÷ 12	223 5
a ÷ 8	2 15 9 3	a ÷ 12	2 15 9 3
b + c	Anſw. 226 0 9 3	b + c	Anſw. 226 0 9 3

Queſt.	309,7 at 1s. 8d.½	Queſt.	309,7 at 1s. 8d.½
s ÷ 120	25 16 2	s ÷ 80	38 14 3
a × 10	258 1 8	s ÷ 12	258 1 8
a ÷ 4	6 9 0 2	a ÷ 6	1 6 9 0 2
b + c	Anſw. 264 10 8 2	b + c	Anſw. 264 10 8 2

Queſt.	432,9 at 1s. 8d.¼	Queſt.	432,9 at 1s. 8d.¼
s ÷ 80	54 2 3	s ÷ 80	54 2 3
a × 7	378 15 9	s ÷ 12	360 15
a ÷ 12	4 10 2 1	a ÷ 4	13 10 6 3
b — c	Anſw. 374 5 6 3	b + c	Anſw. 374 5 6 3

Queſt.	427,9 at 1s. 9d.	Queſt.	4279 at 1s. 9d.
s ÷ 80	53 9 9	s × 7	2995.3
a × 7	Anſw. 374 8 3	a ÷ 80	Anſw. 374 8 3

Queſt.	5765 at 1s. 9d.¼	Queſt.	576,5 at 1s. 9d.¼
s ÷ 12	480 8 4	s ÷ 80	72 1 3
a ÷ 4	120 2 1	s × 7	504 8 9
b ÷ 4	30 0 6 1	a ÷ 12	6 0 1 1
a + c	Anſw. 510 8 10 1	b + c	Anſw. 510 8 10 1

Quest.	379,4 at 1s. 9d.½	Quest.	379,4 at 1s. 9d.½
s ÷ 20	189 14	s ÷ 80	47 8 6
s ÷ 30	126 9 4	a × 7	331 19 6
a ÷ 8	23 14 3	a ÷ 6	7 18 1
a + c 3	Answ. 339 17 7	b + c	Answ. 339 17 7

Quest.	485,9 at 1s. 9d.¼	Quest.	485,9 at 1s. 9d.¼
s ÷ 80	60 14 9	s ÷ 120	40 9 10
a × 7	425 3 3	a × 11	445 8 2
a ÷ 4	15 3 8 1	a ÷ 8	5 1 2 3
b + c	Answ. 440 6 11 1	b — c	Answ. 440 6 11 1

Quest.	398,2 at 1s. 10d.	Quest.	3982 at 1s. 10d.
s ÷ 120	33 3 8	s × 11	4380,2
a × 11	Answ. 365 0 4	a ÷ 120	Answ. 365 0 4

Quest.	4873 at 1 s. 10 d.¼	Quest.	487,3 at 1s. 10d.¼
s ÷ 12	406 1 8	s ÷ 120	40 12 2
a ÷ 10	40 12 2	a × 11	446 13 10
b ÷ 8	5 1 6 1	a ÷ 8	5 1 6 1
a + c 3	Answ. 451 15 4 1	b + c	Answ. 451 15 4 1

Quest.	9271 at 1 s. 10 d.½	Quest.	9271 at 1 s. 10 d.½
s ÷ 12	772 11 8	s ÷ 8	1158 17 6
a ÷ 8	96 11 5 2	a ÷ 12	96 11 5 2
a + b	Answ. 869 3 1 2	b × 9	Answ. 869 3 1 2

Queſt.	3578 at 1s. 10 d.¼
s ÷ 12	298 3 4
a ÷ 8	37 5 5
b ÷ 10	3 14 6 2
a + c 3	Anſw. 339 3 3 2

Queſt.	357,8 at 1s. 10 d.¼
s ÷ 30	119 5 4
s ÷ 30	119 5 4
s ÷ 40	89 9
c ÷ 8	11 3 7 2
a + d 4	Anſw. 339 3 3 2

Queſt.	6986 at 1s. 11d.
s ÷ 12	582 3 4
s ÷ 80	87 6 6
a + b	Anſw. 669 9 10

Queſt.	6986 at 1s. 11 d.
s ÷ 8	873 5
a ÷ 2	436 12 6
s ÷ 30	232 17 4
b + c	Anſw. 669 9 10

Queſt.	7631 at 1s. 11d.¼
s ÷ 12	635 18 4
s ÷ 80	95 7 9
b ÷ 12	7 18 11 3
a + c 3	Anſw. 739 5 0 3

Queſt.	763,1 at 1s 11d.¼
s ÷ 40	190 15 6
a × 4	763 2
a ÷ 8	23 16 11 1
b — c	Anſw. 739 5 0 3

Queſt.	4987 at 1s. 11d.½
s ÷ 12	415 11 8
s ÷ 80	62 6 9
b ÷ 6	10 7 9 2
a + c 3	Anſw. 488 6 2 2

Queſt.	498,7 at 1s 11d.½
s ÷ 40	124 13 6
a × 4	498 14
a ÷ 12	10 7 9 2
b — c	Anſw. 488 6 2 2

Queſt.	3583 at 1s. 11d.¼	Queſt.	3583 at 1s. 11d.¼
s ÷ 12	298 11 8	s ÷ 8	447 17 6
s ÷ 80	44 15 9	s ÷ 12	298 11 8
b ÷ 4	11 3 11 1	a ÷ 8	55 19 8 1
a + c 3	Anſw. 354 11 4 1	b + c	Anſw. 354 11 4 1

If the Reader be well acquainted with the foregoing Queſtions, it will be very eaſy for him to perform any Thing from a Farthing to a Pound; becauſe all the even Numbers of Shillings may be done at one Operation, by the following Rule.

Multiply the Sum given by half the Number of Shillings: Let the firſt Figure produced be doubled and put in the Place of Shillings, and the reſt will be Pounds.

Exempli Gratia.

Let it be required to Caſt up 359 Ells, at 8 Shillings *per* Ell. *viz.*

Queſt.	359 at 8 s.
s X ⅘	Anſw. 143 12

Thus performed.

Becauſe

Becauſe 4 Shillings is the one Half of 8 Shillings, multiply 359 the Sum given by 4, ſaying, 4 times 9 is 36, but 6 being the firſt Figure produced, double it and put 12 in the Place of Shillings; then proceed with the Multiplication by 4, *viz.* 4 times 5 is 20, and 3 is 23, put down the Figure 3, and conclude the Work with 4 times 3 is 12, and 2 is 14, which makes 143 12 as in the Example.

The Reaſon of the Rule.

'Tis evident that in any even Number of Shillings, there are half ſo many times 2 Shillings; therefore if the Sum given be multiplied by half the Shillings, the Product will be a Queſtion at 2 Shillings equivalent to the former: But 2 Shillings being the Tenth Part of a Pound, and the dividing by Ten no more than ſeparating the Figure in the Place of Units, that doubled muſt produce Shillings, and the Reſt will be Pounds, as the Rule directs.

Queſtions of all the even Numbers of Shillings, from two Shillings to a Pound.

Queſt.	734.5 at 2 *s.*	This needs no ſecond Operation, being evident at ſight.
s ÷ 10	*Anſw.* 734 10	

Queſt.	8139 at 4 *s.*	*Queſt.*	8139 at 4 *s.*
s × $\frac{1}{10}$	*Anſw.* 1627 16	*s* ÷ 5	*Anſw.* 1627 16

Queſt.	1533 at 6 s.	Queſt.	1533 at 6 s.
s × 3/10	Anſw. 459 18	s × 3	459,9
		a ÷ 10	Anſw. 459 18

Queſt.	7557 at 8 s.	Queſt.	7557 at 1 s.
s × 4/10	Anſw. 3022 16	s × 4	3022,8
		a ÷ 10	Anſw. 3022 16

Queſt.	645 at 10 s.	Queſt.	645 at 10 s.
s × 5/10	Anſw. 322 10	s ÷ 2	Anſw. 322 10

Queſt.	867 at 12 s.	Queſt.	867 at 12 s.
s × 6/10	Anſw. 520 4	s × 6	520,2
		a ÷ 10	Anſw. 520 4

Queſt.	6453 at 14 s.	Queſt.	6453 at 14 s.
s × 7/10	Anſw. 4517 2	s × 7	4517,1
		a ÷ 10	Anſw. 4517 2

Queſt.	953 at 16 s.	Queſt.	953 at 16 s.
s × 8/10	Anſw. 762 8	s × 8	762,4
		a ÷ 10	Anſw. 762 8

Queſt.	8103 at 18 s.	Queſt.	8103 at 18 s.
s × 9/10	Anſw. 7292 14	s × 9	7292,7
		a ÷ 10	Anſw. 7292 14

Questions between 2 Shillings and a Pound.

Queſt.	579 at 3 s. 2 d.	Queſt.	579 at 3 s. 2 d.
s ÷ 8	72 7 6	s ÷ 6	96 10
s ÷ 30	19 6	s ÷ 120	4 16 6
a + b	Anſw. 91 13 6	a — b	Anſw. 91 13 6

Queſt.	710,0 at 5 s. 10 d. ½	Queſt.	7100 at 5 s. 10 d. ½
s ÷ 20	355	s × 1 3/10	1420
a × 6	2130	s ÷ 12	591 13 4
a ÷ 8	44 7 6	b ÷ 8	73 19 2
b — c	Anſ. 2085 12 6	a + c 3	Anſw. 2085 12 6

Queſt.	150,4 at 9 s. 2 d.	Queſt.	1504 at 9 s. 2 d.
s × 1 4/10	601 12	s ÷ 12	125 6 8
s ÷ 20	75 4	s ÷ 2	752
b ÷ 6	12 10 8	a ÷ 2	62 13 4
a + c 3	Anſw. 689 6 8	b — c	Anſw. 689 6 8

Queſt.	702 at 11 s. 4 d. ½	Queſt.	702 at 11 s. 4 d. ½
s ÷ 8	87 15	s ÷ 2	351
s × 1 4/10	421 4	s ÷ 20	35 2
a ÷ 4	21 18 9	b ÷ 4	8 15 6
b — c	Anſw. 399 5 3	c ÷ 2	4 7 9
		a + d 4	Anſw. 399 5 3

Queſtions between 2 Shillings and a Pound.

Queſt.	853½ at 13 s. 9 d.	Queſt.	853½ at 13 s. 9 d.
s ÷ 80	10 13 3	s × 1/10	597 2
s × 1/10	511 16	s ÷ 8	10 13 3
a × 7	74 12 9	a — b	586 8 9
r ÷ 2	6 10 2	r ÷ 2	6 10 2
b + d 3	Anſw. 586 15 7 2	c + d	Anſw. 586 15 7 2

Queſt.	714 at 14 s. 11 d. ¼	Queſt.	714 at 14 s. 11 d. ¼
s × 1/10	499 16	s ÷ 40	17 17
s ÷ 30	23 16	s ÷ 4	178 10
s ÷ 80	8 18 6	b × 3	535 10
c ÷ 12	14 10 2	a ÷ 8	2 4 7 2
a + d 4	Anſw. 533 5 4 2	c — d	Anſ. 533 5 4 2

Queſt.	184⅛ at 15 s. 4 d.	Queſt.	184⅛ at 15 s. 4 d.
s × 1/10	128 16	s × 1/10	147 4
s ÷ 30	6 2 8	s ÷ 30	6 2 8
s ÷ 30	6 2 8	a — b	141 1 4
r ÷ 2	7 8	r ÷ 8	1 11
d ÷ 4	1 11	d × 5	9 1
a + e 5	Anſw. 141 10 11	c + e	Anſw. 141 10 11

Questions between 2 Shillings and a Pound.

Quest.	544 at 18 s. 3 d ¾
s ÷ 8	68
s × 10/20	489 12
a ÷ 8	8 10
b + c	Answ. 498 2

Quest.	544 at 18 s 3 d. ¾
s ÷ 80	6 16
s ÷ 12	45 6 8
b × 11	498 13 4
a ÷ 12	11 4
c — d	Answ. 498 2

Quest.	571 at 19 s. 0 d. ¼
s ÷ 8	71 7 6
a ÷ 8	8 18 5 1
b × 3	26 15 3 3
s — c	Answ. 544 4 8 1

Quest.	571 at 19 s. 0 d. ¾
s ÷ 40	14 5 6
s × 10/20	513 18
a × 2	28 11
a ÷ 8	1 15 8 1
b + d	Answ. 544 4 8 1

Questions at Large.

Quest.	215 at 2 l. 13 s. 10 d.
s × 10/20	193 10
a × 3	580 10
s ÷ 120	1 15 10
b — c	Anf 578 14 2

Quest.	215 at 2 l 13 s. 10 a.
s × 2	430
s ÷ 3	71 13 4
s ÷ 3	71 13 4
s ÷ 40	5 7 6
a + d	Anf. 578 14 2

Queſt.	187¼ at 3l 3s 9d.	Queſt.	187¼ at 3l.3s.9d.
s × 3	561	s × 3	561
s ÷ 8	23 7 6	a ÷ 20	28 1
b ÷ 2	11 13 9	b ÷ 4	7 0 3
r ÷ 2	1 11 10 2	r ÷ 4	15 11 1
d ÷ 2	15 11 1	d × 3	2 7 9 3
a + c 5	Anſw. 598 9 0 3	a + c 4	Anſw. 598 9 0 3

Queſt.	841 at 3l. 18s. 4d.	Queſt.	841 at 3l.18s.4d.
s × 4	3364	s × 3	2523
s ÷ 12	70 1 8	s × 1/10	756 18
a — b	An. 3293 18 4	s ÷ 80	14 0 4
		a + c 3	An. 3293 18 4

Queſt.	210 7 at 4l.0s.1d.¼	Queſt.	210,7 at 4l.0s.1d.¼
s ÷ 20	105 7	s ÷ 120	17 11 2
s × 4	8428	a ÷ 8	2 3 10 3
a ÷ 8	13 3 4 2	s × 4	8428
c ÷ 6	2 3 10 3	a — b	15 7 3 1
b + d 3	An. 8443 7 3 1	c + d	A. 8443 7 3 1

Queſt.	319 at 4l. 16s.	Queſt	319 at 4l. 16s.
s × 1/10	191 8	s × 1/10	127 12
a × 8	Anſ. 1531 4	a × 12	Anſ. 1531 4

Questions at Large.

Quest.	950 at 4l.17s.8d.	Quest.	950 at 4l.17s.8d.
s × 4	3800	s ÷ 60	15 16 8
s × 1 2/6	760	s × 5	4750
s ÷ 12	79 3 4	a × 7	110 16 8
a + c. 3	Anſ. 4639 3 4	b — c	Anſ. 4639 3 4

Queſt.	563 7/8 at 11l.14s.6d.	Queſt.	563 7/8 at 11l.14s.6d.
s × 11	6193	a × 6	6193
s × 1 7/20	394 2	s × 1 6/20	337 16
s ÷ 40	14 1 6	s ÷ 8	70 7 6
r ÷ 8	< 1 9 3 3	r ÷ 2	5 17 3
d × 7	10 5 2 1	d ÷ 2	2 18 7 2
a + e 3	An.6611 8 8 1	e ÷ 2	1 9 3 3
		a + c 3	An.6611 8 8 1

Queſt.	29,7 at 35l.0s.0d.1/2	Queſt.	29,7 at 35l.0s.0d.1/2
s ÷ 40	7 8 6	s ÷ 80	3 14 3
s × 7	2079	s × 5	1485
b × 5	10395	b × 7	10395
a ÷ 12	12 4 2	a ÷ 6	12 4 2
c + d	A.10395 12 4 2	c + d	A.10395 12 4 2

The preceding Examples ſeem to have ſufficient Variety to inform the Reader in this the moſt uſeful Part of Arithmetick, and in all Probability may lead him to further Enquiries of this Kind; I ſhall therefore, add only one Example in Fractions, as a Step to ſuch Progreſs, and wiſh him all imaginable Succeſs.

An Example in Fractions.

Queſt.		C. 47	qr. 3	lb. 19	at	l. 7	s. 17	d. 10 ¼	*per Cent.*
s ×	7	329							
s ×	1/10	37	12						
s ×	12	3	18	4					
c ÷	8		9	9	2				
d ÷	10			11	3				
r ÷	2	3	18	11	1	1/2	=	56	
f ÷	2	1	19	5	2	1/4	=	84	
p ÷	2		19	8	3	1/8	=	42	
t ÷	7		5	7	2	2/28	=	76	
i ÷	4		1	4	3	1/112	=	75	
a | k	*Anſw.*	378	6	3	2	102/112		111/112	

The

Remarks upon Customs and Exchange.

THE Officers of the Customs generally calculate the Duties of that Revenue by Rules of Practice, and are indeed very expeditious therein; nor can any other Method be wholly serviceable to them, considering that those Duties are appropriated to particular Funds: But the Merchants, who are no wise concern'd with the Application of the Sums payable, may find by the Help of Decimal Numbers fitted for the whole Duty, what the Custom of any imported or exported Commodity will amount to, with more Ease, than any other Way of Computation will admit of.

The following Calculation will shew how the Numbers are found correspondent to the Custom of *Tobacco*, and will I presume be a sufficient Inlet to those who are acquainted with Decimal Arithmetick for the finding any other suitable to their Occasion.

d.	240 ℔	Old Subsidy =	,95
1 *per* ℔ =	1 *l.*	New Subsidy =	,92625
5 *per Cent.* off =	,05	Addit. Duty =	,87875
Old Subsidy =	,95	⅓ New Sub. =	,29485625
2½ *per Cent.* off =	,02375	Impost =	2,484
New Subsidy =	,92625	Duty of 240 ℔ =	5,53385625
5 *per Cent.* more off the old, *viz.* 7½ =	,0475	Duty of 12 ℔ =	,2766828125
Additioual Duty =	,87875	Duty of 1 ℔ =	,0230570234375
⅓ of the New Subsidy with 4½ *per Cent.* off =	,30875 ,01389375 ,29485625		
3 *d. per* ℔ =	3,		
10 *per Cent.* off =	,3		
	2,7		
8 *per Cent.* off =	,216		
Impost =	2,484		

A Table for the Custom of Tobacco.

lb		lb	
1	= ,0023057734375	6	= ,13834640625.
2	= ,04611546875.	7	= ,161404140625
3	= ,069173203125	8	= ,184461875...
4	= ,0922309375..	9	= ,207519609375
5	= ,115288671875		

By the Help of the foregoing Table, which may be entred in a Pocket-Book, the Duty of any Quantity of *Tobacco*, consisting of one Figure and the rest Cyphers, may be known by Inspection, and any other by Addition only.

Let it be required to find the Duty of 3000 lb

Separate as many Places towards the left Hand of the Tabular Number against the Figure 3, as there are Cyphers in the Number propos'd, *viz.* 3 Places, thus, 069,173203125, double the Figure next following the Comma, for Shillings, *viz.* twice 1 are 2 Shillings, and because the Figure following exceeds 5, take 5 from it, for which add one Shilling more, *viz.* 3 Shillings: The 2 which remain, after the taking away of 5 from 7, will make the next Figure 23, which count as so many Farthings, with this Caution only, That between 3 *d.* and 9 *d.* one Farthing must be abated, and between 9 *d.* and a Shilling 2 Farthings; the Duty then of 3000 lb is 69 *l.* 3 *s.* 5½ *d.*

Other Numbers are thus Computed.

lb			*l.*	*s.*	*d.*
5789	= 5000	=	115	5	9
	700	=	16	2	9½
	80	=	1	16	10½
	9	=	0	4	1¼
	Total,	=	123	9	6¾

An

An Example for the Duty on Holland Cloth.

Suppoſe 80 Ells, at 3 *d. per* Ell.

	l.
5 *per Cent.* off	= ,05
Old Subſidy	= ,95
New Subſidy	= ,95
½ of the Old	= ,475
10 *per Cent.* off	= ,0475
Additional duty	= ,4275
⅓ of the oldSub.	= ,31166666666

Old Subſidy	= ,95
New Subſidy	= ,95
Addit. Duty	= ,4275
⅓ of the Old	= ,31166666666
Duty of 80 *Ells*	= 2,64416666666
One Ell	= ,03305208333

The Table.

Ells.		
1	=	,03305208333
2	=	,06610416666
3	=	,09915624999
4	=	,13220833333
5	=	,16526041666
6	=	,19831249999
7	=	,23136458333
8	=	,26441666666
9	=	,29746874999

Now Nothing can be more ready than this Table, to Calculate the Cuſtom of any Quantity of *Hollands* whatſoever, as may appear by the following Examples.

Ells		l.	s.	d.	
50000	=	1652	12	1	
8000	=	264	8	3 ¼	} Theſe by Inſpection only.
900	=	29	14	11	
70	=	2	6	3	

Let it be required to find the Duty of 9463 Ells.

Ells		l.	s.	d.	
9000	=	298	9	4	¼
400	=	13	4	4	¼
60	=	1	19	8	
3	=		1	11	¼
Anſwer by Addition	=	315	15	4	¾

The

The Use of Decimal Fractions in computing the Exchange between one Country and another is in many Cases preferable to all other Methods whatsoever.

A in *Amsterdam* is indebted to *B* in *London F.* 14379 : 13 Exchange 33 *s.* 8 *d.* Agio 4 ½ *per Cent.*

Quere how much Sterling.

33 *s.* 8 *d.* is 10,1 Gilders

4 *per Cent.* = ,404

½ *per Cent.* = ,0505

Gilders for 1 *l.* = 10,5545 | 14379,6500000 | 1362,418 ½

382515 *Answ.* 1362 8 4 ¾

658800

255300

442100

199200

936550

Note, That 3 Places of Decimals are added to the Dividend, more than those in the Divisor, which answer to Shillings, Pence and Farthings, by the Rule of valuing a Decimal Fraction, afore-mentioned.

A in *Gothenburg* is indebted to *B* in *London*, 29553 Copper Dollars, Exchange at 25 ⅛ Dollars for one Pound Sterling.

25,875 | 29553,000000 | 1142, 144

l.

36780 *Anf.* 1142 2 10 ½

109050

55500

37500

116250

127500

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FINIS.